



ORC

Offshore Racing Congress
World leader in rating technology

2020
ORC Club
Certificate

Rating Office

Hellenic Sailing Federation
Offshore Committee
Επιτροπή
Ανοικτής Θαλάσσης
Ελληνικής
Ιστιοπλοϊκής Ομοσπονδίας



Certificate

Number **00388**
Issued On **26/06/2020**
ORC Ref **03420000LIL**
VPP Ver. **2020 1.02**
Valid until **28/02/2021**

Crew Weight

Default 531kg
Maximum **450kg**
Minimum* **338kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	733.1	0.8184
Non Spin OSN	707.6	0.8480

Sails Limitations

Headsails **5** Spinnakers **4**

Spinnaker configuration

Symmetric: **Yes** **62.25**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

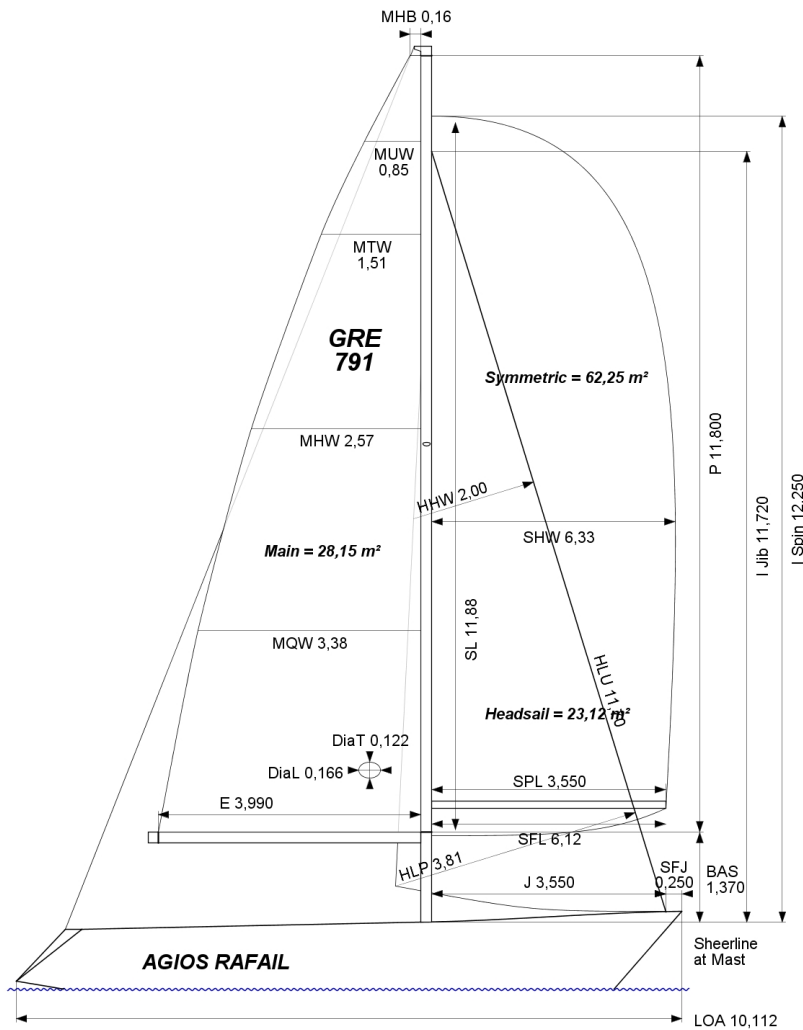
Class Division Length

CDL = 7.498

Stability (Measured)

Limit Positive Stab.: **112.5°**
Stability Index: **110.6**

Owner



BOAT		GPH	HULL			
Name AGIOS RAFAIL Sail Nr GRE-791		698.1	Data File GR791	LOA 10.112m		
			Offset File G1005.BOF	MB 3.406m		
			Displacement 4,330kg	Draft 1.762m		
CLASS			IMS Division Cruiser/Racer	Dynamic All. 0.321%		
Class DEHLER 34			Plan Review	Construction Solid		
Designer VAN DE STADT			Fiber Rigging No	Aramid Core No		
Builder DEHLER			Crew Arm Ex	Carbon Rudder No		
Series 01/1982				Light Stanchions No		
Age Date 01/1987			IMSL 8.354m	VCGD 0.060m		
Age Allowance 0.487%			RL 6.648m	VCGM 0.050m		
COMMENTS			WS 21.15m²	LSM0 8.335m		
ex "DAFNI"			Displacement/Length ratio 7.4778	Water Ballast 0		
				Trim Tab No		
				BLR Index 0.0000		
PROPELLER			CENTERBOARD			
Installation Shaft exposed	PRD 0.420		NA			
Type Feathering 3 blades	PBW 0.135					
	PIPA 0.0042					
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	676.9			755.1		
Time on Time	0.8864			0.8939		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	808.5	616.0	546.3	1046.3	761.5	653.6
Time on Time	0.8349	1.0958	1.2356	0.6451	0.8864	1.0327

BOAT	
Name AGIOS RAFAIL	Sail Nr GRE-791
File GR791	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS					
Inclining Test Current Inclining					
Flotation date 13/05/2018				SG 1.0270	
FFM	1.163	FF	1.162	SFFP	0.657
FAM	0.868	FA	0.868	SAFP	9.114
W1	61.7	PD1	557.6	WD	9.975
W2	61.7	PD2	559.1	GSA	1.0
W3	61.7	PD3	558.5	RSA	1.0
W4	61.7	PD4	558.9	PLM	9000.0
LCF from stem on CL / on sheer				5.602 / 5.848	
Maximum beam station from stem				6.178	
RM Measured				86.8kg-m	
RM Default				83.0kg-m	
Limit of positive stability / Stab.Index				112.5° / 110.6	
Freeboard at mast at 3.800				1.014	



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Measurements
Datasheet


RIG					
Forestay Tension	Fixed	Spreaders	1		
Inner Stay	None Fitted	Runners/Checkstays	0		
Carbon Mast	No	Jib Furler	No		
Fiber Rigging	No	Main Furler	No		
Non-Circular Rigging	No				
Articulated Bowsprit	No				
P	11.800	E	3.990	MDT1	0.122
IG	11.720	J	3.550	MDL1	0.166
ISP	12.250	SFJ	0.250	MDT2	0.122
BAS	1.370	SPL	3.550	MDL2	0.166
FSD	0.026	TPS		TL	0.000
				MW	0.166
				GO	0.166
				BD	0.164
				MWT	
				MCG	

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation	Shaft exposed	PRD	0.420
Type	Feathering 3 blades	PBW	0.135
Twin Screw	No	PIPA	0.0042
PSA	17.800	PHL	0.105
PSD	0.025	ST1	0.031
PHD	0.064	ST2	0.100
ST3	0.100	ESL	0.840
ST4	0.047	ST5	0.205

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COMMENTS	
ex "DAFNI"	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0.16	0.85	1.51	2.57	3.38	28.16		24/04/2018		Pentex						
HEADSAILS (2)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.10	0.59	1.08	2.00	2.90	3.81	11.70	107%	23.12		No		19/05/2012		Pentex	
2	0.04	0.31	0.59	1.23	1.97	2.78	12.12	78%	15.86		No		19/05/2012		Dacron	
SYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
S1	11.88	11.88	11.88	6.33	6.12	62.26		13/07/2009		Nylon						
1	11.09	11.09	11.09	6.32	6.04	57.89				Polyester						
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				

MEASUREMENT INVENTORY				
Measurer GRE-28				
Date 13/05/2018				
Comment				
Internal Ballast total = 0.0				
Id	Item	Weight	Distance	VCG Description
Id	Item	Maker	Model	
1	Engine	YANMAR	3GM30F	27hp
Id	Item	Weight	Description	

MEASUREMENT INVENTORY								
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
1	Tank	Water	GRP	90.0	2.00	0.10	0-0	under forward bunk
2	Tank	Water	PVC	110.0	4.30	-0.20	0-0	Under port bunk
3	Tank	Fuel	St. Steel	60.0	8.00	0.00	0-0	Starboard aft locker
Id	Item	Weight	Distance	VCG Description				
1	Battery	4.65	-0.20	2 x 90Ah under stbd bunk				
2	Battery	5.60	0.00	74 Ah behind chart table				
1	Misc	0.60	1.12	Anchor windlass lofrans				
2	Misc	10.00	0.40	Bathing ladder				
3	Misc	9.10	1.60	Stainless steel bimini frame				

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ORC Club Certificate Appendix

BOAT	
Name	AGIOS RAFAIL
Sail Nr	GRE-791
Certificate Number	00388
Issued On	26/06/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1225.1	1014.2	896.5	819.0	782.7	772.5	778.1
52°	791.9	668.9	596.5	561.6	545.6	539.2	537.6
60°	745.9	633.2	573.3	546.3	531.7	523.4	519.5
75°	714.9	606.1	557.1	533.9	517.9	505.3	490.2
90°	708.9	590.1	540.1	517.3	505.7	496.9	470.0
110°	701.8	581.0	533.9	507.8	484.6	464.6	444.8
120°	724.3	595.6	540.1	512.7	488.8	465.9	429.6
135°	800.7	653.5	568.0	530.7	506.1	482.1	438.6
150°	940.4	745.2	632.8	563.1	530.0	506.9	462.9
Run VMG	1085.9	860.2	728.4	638.4	574.8	537.8	492.5
Selected Courses							
Windward / Leeward	1155.5	937.2	812.5	728.7	678.8	655.2	635.3
Circular Random	968.4	779.2	676.9	617.0	580.6	557.5	531.0
Coastal / Long Distance	1148.5	878.0	729.2	636.5	588.8	556.7	504.6
Non Spinnaker	1031.7	823.9	709.9	642.4	600.8	574.4	544.2

Velocity Prediction in Knots for True Wind Speeds							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	44.3°	42.8°	42.0°	41.3°	40.1°	39.8°	40.3°
Beat VMG	2.94	3.55	4.02	4.40	4.60	4.66	4.63
52°	4.55	5.38	6.04	6.41	6.60	6.68	6.70
60°	4.83	5.69	6.28	6.59	6.77	6.88	6.93
75°	5.04	5.94	6.46	6.74	6.95	7.12	7.34
90°	5.08	6.10	6.67	6.96	7.12	7.25	7.66
110°	5.13	6.20	6.74	7.09	7.43	7.75	8.09
120°	4.97	6.04	6.66	7.02	7.36	7.73	8.38
135°	4.50	5.51	6.34	6.78	7.11	7.47	8.21
150°	3.83	4.83	5.69	6.39	6.79	7.10	7.78
Run VMG	3.32	4.19	4.94	5.64	6.26	6.69	7.31
Gybe Angles	147.0°	151.0°	153.0°	159.0°	180.0°	180.0°	180.0°